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Ethnicity-related Stress, Mental Health, and Well-being

by

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Abstract

Ethnicity-related stress and its relation to mental health and physical outcomes for African Americans is discussed. Sources of ethnicity-related stress and coping strategies are identified. The results from two studies on group differences in the mental health-related variable of Negative Affectivity (Neuroticism) are reported. The first study demonstrated African Americans ($\underline{N} = 171$) to be significantly lower than Caucasians ($\underline{N} = 211$) on Negative Affectivity facets of anger, discouragement, self-consciousness, and impulsivity. The second study found African Americans ($\underline{N} = 135$) to be significantly lower than Caucasians ($\underline{N} = 149$) on the general factor of Negative Affectivity. The importance of identifying mediating factors between ethnic-related stress and outcomes is emphasized.

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Ethnicity-related Stress, Mental Health, and Well-being

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Earlier work indicated that African Americans had lower levels of Negative Affectivity (Neuroticism) than Caucasians (Johnson, 2000). The present study extends this finding within the context of past research on reactions to prejudice and current literature on responses to ethnicity-related sources of stress (Contrada, Ashmore, Gary, Coups, Egeth, Sewell, Ewell, Goyal, & Chasse, 2000).

This paper is organized in the following manner. First, the historical context of presumed reactions to prejudice and discrimination is outlined. The concept of ethnic-related stress is then presented, and specific sources of this stress (ethnic discrimination, attributional ambiguity, stereotype-threat, and own-group conformity pressure) are described. Mental health and physical well-being outcomes for African Americans are then discussed, and results of two studies contrasting this group with Caucasians on the mental-health related factor of Neuroticism (N or Negative Affectivity) are presented. The paper concludes with a brief discussion regarding the role of moderator variables and coping resources such as church and religious involvement within the stress-coping-outcome paradigm.

Historically, it was believed that stigmatized groups and those who were discriminated against would exhibit mental health outcomes consistent with internalization of negative stereotypes. Further, outcomes such as depression, anxiety, and antisocial behavior as reactions to prejudice were considered to be almost inevitable. For example, Allport (1954; 1979) posed the question, "What would happen to your personality if you heard it said over and over again that you are lazy and had inferior blood?" (p. 42).

Other writers perceived that responses of African Americans to prejudice and oppression would be negative, detrimental to personality development, and lead to psychopathology such as depression, anxiety, and poor self-esteem (Kardiner & Ovesey, 1951; Thomas & Sillen, 1972). Such negative psychological outcomes would be consistent with elevations in the personality factor of Neuroticism (N), which has long been acknowledged for its role in mental health and well-being (Eysenck, (1944); Tellegen, (1985)).

Research and theory has shifted away from earlier internalization notions towards identification of stressors unique to ethnic status and individual/group reactions to such stressors. Measured levels of various mental health outcomes such as self-esteem, depression, and anxiety have been examined. The trend evident in the literature is a focus on more specific versus

general sources of stress for stigmatized groups combined with application of psychological principles relating to reactions of the recipient to stigmatization, prejudice, and discrimination.

Ethnicity-related stress

Although it has long been acknowledged that African Americans, as members of a stigmatized group, may be exposed to generally higher levels of stress than Caucasians, it is only recently that specific sources of such stress have been identified and described. Earlier notions regarding sources of stress included difficulties associated with identity development within a racist and dominant culture (Jackson, 1975), the necessity to adapt to racism (Jones, 1991), and the inherent difficulties associated with acquisition of bicultural competence (LaFromboise, Coleman, & Gerton, 1993). At the very least, African Americans must somehow reconcile their "double consciousness" (DuBois, 1903, p. 5) and address the "triple quandary" (Boykin & Toms, 1985, p. 39) of being American, a minority, and possessing a cultural legacy of slavery with its subsequent history of oppression, segregation, and lack of justice.

Recent conceptualizations of ethnic-related stress have appeared in the literature. Primary concepts include ethnic discrimination, stereotype threat, and own-group conformity pressure (Contrada, et al, 2000). Subsumed under ethnic discrimination would be stress associated with attributional ambiguity (Crocker, Major & Steele, 1998). Contrada, et al., (2000) note the attention has shifted from the perpetrators of prejudice and discrimination to the inner phenomenology of the individual who is the target of discrimination. Further, the contribution of stress theory and recent broadening of outcomes to include psychological and physical wellbeing are acknowledged.

Ethnic discrimination

Contrada, et al, (2000) describe ethnic discrimination as an ever-present psychological stressor that involves unfair treatment of a person due to their ethnicity. Consistent with trends emphasizing more subtle forms of prejudiced behavior that range upon a continuum (e.g. modern or aversive racism), five forms of ethnic discrimination are identified. These include verbal rejection (racial slurs, insults), avoidance (shunning), disvaluation (behaviors signaling negative evaluations), inequality-exclusion (denial of equal treatment or access), and threat-aggression (harm that is threatened or actual).

There is evidence that a majority of African Americans have been the target of ethnic discrimination. Krieger (1990) reported that close to two thirds of African-American participants experienced one or more instances of ethnic discrimination or racially biased treatment. The two most common forms of discrimination for those who were employed included job discrimination and discrimination within the workplace. Feagin (1991) described a range of discriminatory acts varying from physical threats to avoidance behaviors on the part of Caucasians. The most common incidents involved rejection or poor service in public establishments such as restaurants or retail stores. Landrine and Klonoff (1996) documented evidence to support the claim that racial discrimination is relatively common in America and serves as a culturally specific stressor for African Americans.

The conclusion of these and other studies is that mere status as an African American is sufficient to virtually guarantee some level of exposure to ethnic discrimination. However, as Broman, Mavaddat, and Hsu (2000) note, it is also important to measure respondents' perceptions of discrimination in addition to reliance on the assumption that the status of being an African American necessarily leads to being a target of discriminatory practices.

One major implication of ethnic discrimination is that a person can become stigmatized and chronically subjected to the possibility they may be a target of prejudice and discrimination (Jones, Farina, Hastorf, Markus, Miller, & Scott, 1984). This poses a threat to personal self-esteem in that prejudice and discriminatory behaviors signal a lack of regard for one's social identity and value as a person (Tyler & Lind, 1992). Further, one may remain a target of discrimination in the presence of personal merit, achievement, and higher socioeconomic status (Cose, 1993), leaving the individual to cope with the circumstance of being unfairly and superficially judged by others despite the outward indicators of success.

Obviously, interpersonal interactions between stigmatized and non-stigmatized group members can be jeopardized due to ethnic discrimination. Specifically, the chronic possibility of experiencing prejudice may lead a stigmatized person to remain constantly vigilant for cues regarding prejudice, particularly when interacting with nonstigmatized group members who may feel anxious and behave accordingly (Devine, Evett, & Vasquez-Suson, 1996). Further, non-stigmatized individuals often believe they are not prejudiced and may be unaware of behaving in a prejudiced manner (Gaertner & Dovidio, 1986), leaving the stigmatized person in an interpersonally ambiguous situation.

Indeed, more subtle forms of discrimination frequently create ambiguous situations, which must be interpreted and may or may not be reacted to or acted upon. Further, they require judgment regarding whether they truly occurred and their ultimate significance for the individual. Contrada et al, (2000) note that discriminatory behavior is frequently ambiguous because behaviors can be "subtle" or involve treatment that is of borderline acceptability ("The waiter seemed to be ignoring me ..."), the ethnicity-related motives that define them as discriminatory (" because I am Black ...") are often unobservable, and the behavior in question may be subject to alternative explanations ("...though the restaurant was extremely busy") (p. 137).

From the standpoint of mental health and psychological outcomes, such internal cognitive self-statements are likely mildly troubling at best, and serve as a distraction not experienced by majority group members. At worst, they represent an additional overlay of complexity and potential negative consequences that may be ubiquitous and occasionally overwhelming. This lack of clarity in terms of causal attributions for another's behavior has been labeled attributional ambiguity.

Attributional ambiguity

Crocker et al., (1998) discuss the uncertainty associated with interpersonal interactions when one is a member of a stigmatized group. Attributional ambiguity can refer to both negative and positive outcomes of interactions with others. For example, a member of a stigmatized

group may believe someone is behaving towards them in a prejudicial and discriminatory manner, but lack certitude in their belief. Conversely, positive behaviors from others may be ambiguous and open to varying interpretations on the part of the stigmatized. Hence, the individual is confronted with a lack of clarity regarding explanations of another's behavior.

There are several potential consequences that can occur when a stigmatized individual experiences a negative evaluation or interaction with a person from a non-stigmatized group. One such consequence is the attribution of the negative outcome to prejudice and discrimination on the part of the sender of the message. On the other hand, a stigmatized person may experience attributional ambiguity where they are uncertain whether prejudice or a genuine negative evaluation is occurring. The concept of attributional ambiguity means that a negative interaction can be interpreted in several different ways ranging from one's lack of merit or poor performance to the occurrence of prejudicial behavior based upon one's membership in a stigmatized group.

Crocker et al., (1998) note that negative outcomes springing from prejudice but ambiguously interpreted, may threaten self-esteem. That is, "It should be less threatening to self-esteem to be sure that a rejection is the result of prejudice than to wonder whether it might have been due to prejudice." (p. 520, emphasis added). Knowledge that one is treated negatively due to racism or sexism may have a self-esteem buffering function, in that the negative interaction or feedback is explained by the perpetrator's biases, while lack of clarity results in potentially self-esteem damaging attributions regarding one's perceived weaknesses or limitations. Ironically, manifestations of prejudice that are less overt and more "modern" likely create a greater potential for ambiguity. Hence, modern racism may be more self-esteem threatening than overt (hence, less ambiguous) forms of racism.

Positive interactions can also create opportunities for attributional ambiguity. Crocker et al, (1998) note that positive responses towards stigmatized persons may reflect a variety of motivations. Motivations include the attempt to demonstrate egalitarianism (Gaertner & Dovidio, 1986), or avoid the appearance of prejudice (Carver, Glass, & Katz, 1977). Of course, positive interactions can also reflect genuine feelings of affection and respect (Carver, et al., 1977). Nevertheless, the ambiguity surrounding the positive interaction can threaten self-esteem (Crocker & Major, 1989). A stigmatized individual may discount positive interactions or inputs simply because they were obtained via their membership in a stigmatized group, resulting in difficulties in assuming personal credit for positive events. For example, Crocker, Voelkl, Testa, & Major (1991) demonstrated decrements in self-esteem in stigmatized individuals subsequent to ambiguously positive feedback, where self-esteem actually increased subsequent to attributionally unambiguous positive feedback.

Stereotype threat

A second major ethnic-related stressor is stereotype threat (Steele, 1997). This involves a situation where a negative stereotype about one's group becomes "self-relevant" (p. 616) with a variety of possible consequences for the stigmatized or stereotyped individual. In the typical instance, self-relevance occurs when a person is in a situation that is important to their identity and sense of self. That is, they are personally invested in the interaction or outcome. This

magnifies the importance of the particular situation or experience since it is connected, sometimes intricately, to an individual's self-concept.

For example, in situations involving a performance criterion (such as obtaining a good score on the Graduate Record Exam), the individual whose self-identity is strongly related to academic achievement would experience a "self-relevant" situation. If a negative stereotype about the person's group is present, they are vulnerable to stereotype threat which may have a variety of negative consequences, including increased pressure to perform and interference in performance. Following this line of reasoning, if women are not athletic and cannot golf, a woman who seeks to hit a long drive in the company of men may fear supporting this negative stereotype. This fear and subsequent anxiety may interfere with her ability to perform, thereby confirming the negative stereotype and raising the specter of a future self-fulfilling prophecy.

Steele (1997) provides examples and empirical support for the construct of stereotype threat for women and African Americans. In the case of African Americans, Steele and Aronson (1995) examined the standardized test performances of Stanford University students. The self-relevance of test performance was assumed since all the students were identified with the domain of academic achievement. In their first study, the most difficult items from the Scholastic Aptitude Test-Verbal (SATV) were administered to African-American and Caucasian students under one of two conditions: ability-diagnostic (where participants were told the test was of intellectual ability); and ability-nondiagnostic (where the test was presented as a problem-solving task unrelated to ability). Findings indicated the performances of African Americans to be significantly worse than Caucasians in the ability-diagnostic condition. However, performances between the two groups were equivalent in the ability non-diagnostic condition.

In a second study (Steele, 1997), stereotype threat was manipulated simply by "racial priming" or asking participants to record their race on a demographic questionnaire prior to taking the test (which in this study was described as ability non-diagnostic). Again, African Americans significantly underperformed Caucasians in the racial priming condition, but not in the non-racial priming condition. Steele (1997) concluded, "Salience of the racial stereotype alone was enough to depress the performance of identified Black students." (p. 620).

Contrada, et al., (2000) extended the concept of stereotype threat to include the idea of stereotype-confirmation concern. This refers to concern springing from the "relatively enduring or recurring experience of stereotype threat" (p. 137). These authors note that some individuals may experience chronic apprehension about appearing to confirm an ethnic stereotype, and that multiple stereotypes may create such apprehension or concern. Contrada, et al., (2000) conclude that stereotype-confirmation concern "appears to represent a distinct dimension of ethnicity-related stress." (p. 138).

Own-group conformity pressure

The final source of ethnicity-related stress is that of own-group conformity pressure (Contrada, et al., 2000). As the name implies, this stressor emanates from one's own group when the individual experiences pressure from group expectations that specify acceptable or unacceptable behavior. Among diverse college students, examples include such things as

pressures to listen to certain music or dress a certain way, or to refrain from dating a member of a different ethnic group.

Own-group conformity pressure is implicit in Boykin & Toms (1985) notion of a triple quandary, where an individual must reconcile the three interrelated statuses of being an American, a minority, and "inheriting" a legacy of slavery and resulting discrimination. Although there is little to no empirical research to date on the construct of own-group conformity pressure, there is information suggesting that an interactional adaptation to biculturalism is optimal (LaFromboise, et al., 1993). That is, an individual achieves bicultural competence when they are able to perform and behave in both their own culture and that of the majority culture. Hence, an African American who succeeds in flexible adaptation within both minority and majority cultures is less likely to be susceptible to stressors emanating from own-group conformity pressure.

Contrada, et al., (2000) note the three ethnic-related stressors of ethnic discrimination, stereotype threat, and own-group conformity pressure are relatively independent of each other. Hence, an individual can experience one or all three of them, and to varying degrees. Of course, these are also likely superimposed upon or coexistent with non ethnic-linked stressors such as marital strife, financial difficulties, and vocational stress.

Mental health, physical health, and coping of African Americans

Consistent with observations made by Graham, (1992), there is a relatively small number of empirical studies of African Americans within the psychological literature. However, there is some information regarding psychological outcomes and, more recently, physical correlates of ethnic discrimination.

There are at least three ways that racism can negatively affect mental health outcomes (Williams & Williams, 2000). First, social and institutional racism can contribute to substandard living conditions, decreased access to desired resources, and limited socioeconomic advancement. Secondly, experience of ethnic-related discrimination can induce both physiological and psychological reactions that ultimately negatively impact mental health status. Finally, it has been hypothesized that acceptance of negative stereotypes can lead to negative self-evaluations that can impact well-being (Williams & Williams, 2000).

Mental health outcomes

There is a widely held assumption that individuals who are targets of racism and discrimination must necessarily react with low self-esteem, anger, depression, and dissatisfaction (Crocker, et al., 1998). However, empirical research regarding higher prevalence rates of mental health difficulties and lack of well-being in African Americans has not consistently supported this idea. Thus, ethnicity-related stressors constitute a reality of daily life for African Americans but do not appear to globally or consistently affect negative psychological outcomes.

In the area of self-esteem, African Americans do not score lower than Caucasians on measures (Crocker et al., 1998). Crocker and Major (1989) reviewed studies comparing the self-

esteem between various groups and concluded: "In short, this research, conducted over a time span of more than 20 years, leads to the surprising conclusion that prejudice against members of stigmatized or oppressed groups generally does not result in lowered self-esteem for members of those groups" (p. 611). In terms of negative evaluations of one's social group, Crocker, et al., (1994) studied the collective self-esteem of African-American and other groups and found that African-American students privately evaluated their racial group more positively than did Caucasians or Asian-Americans. Hence, the consensus in the literature is that African Americans do not exhibit either individual or collective self-esteem decrements relative to Caucasians.

In terms of the outcome of life satisfaction, several studies have shown that African Americans are less satisfied with their lives than are Americans of European ancestry. However, they are on average at least "pretty happy" and at least "somewhat satisfied" with their lives (Diener, 1984). Subsequently, Diener & Diener (1996) note that "although ethnic minority and disadvantaged groups sometimes report lower subjective well-being than broader samples, they nevertheless score in the positive range." (p. 7).

Studies regarding the outcome of depression in African Americans are mixed, likely partly related to lack of covariance or matching on the variable of socioeconomic status (Aneshensel, Clark, & Frerichs, 1983). However, there is some evidence for higher rates of depressive symptoms in African Americans (Crocker et al., 1998). Similarly, Williams, Spencer, & Jackson (1999) demonstrated ethnic discrimination to be associated with negative psychological and physical health outcomes. Broman, Mavaddat, & Hsu (2000), using a learned helplessness framework, demonstrated a significant link between experience of discrimination, decreased sense of mastery, and psychological distress in their sample of African Americans.

In contrast, Johnson and Johnson (1992) demonstrated African Americans were less likely to be distressed when compared with other inner-city residents of varying races. Along similar lines, McNulty, Graham, Ben-Porath, and Stein (1997) did not find significant differences in depression or anxiety scales of the Minnesota Multiphasic Personality Inventory (MMPI)-2 between African Americans and Caucasians. Contrada et al., (2000) note that the literature has yet to separate the relative contributions of ethnic-related stress, socioeconomic status, and other causal determinants to mental health outcomes in African Americans.

The role of the personality factor of Negative Affectivity, or Neuroticism (N), in mental health outcomes has long been acknowledged. That is, higher levels of N are associated with anxiety, unhappiness and depression, and less well-being and life satisfaction (see Eysenck, 1944) for an early exposition of the role of Neuroticism in mental health). In essence, higher levels of N correlate with greater anxiety, and anxious individuals experience more intense negative emotional mood states than non-anxious ones (Tellegen, 1985). High scorers are generally emotionally reactive, tense, alert, and anxious. In contrast, low scorers are stress-free, controlled, content, and secure. Examination of the six facets (subscales) that comprise N reveal constructs with demonstrable association to indices of mental health and well-being.

Neuroticism essentially measures stress resilience and emotional reactivity. On a continuum, an individual can be low, medium, or high in N. Similarly, each of the six facets of

N can be ranked on a continuum. The first facet, N1, or worry, generally measures an individual's worry and fear about how things will turn out. Individuals low on this are often calm, unconcerned, and free from apprehension while individual's high are often uneasy, edgy, and anxious. The second facet, Anger (N2), taps into how quickly individuals feel angry and bitter. Those high in N2 are relatively quick to feel anger while those low in N2 are composed and slow to experience anger. Discouragement (N3) taps the general tendency to experience sadness, hopelessness, and demoralization. Those low in N3 are guilt-free and rarely experience discouragement while individuals high in N3 are easily discouraged. Self-consciousness (N4) refers to shame or embarrassment at awkward social situations. Hence, those low in N4 are status-free and rarely embarrassed while those high in N4 are easily embarrassed and frequently feel "silly" or put on the spot. Impulsiveness (N5) involves the tendency to yield to temptations. High scorers are excitable and easily tempted to indulge in eating, drinking, tobacco use, drugs, or shopping. Low scorers tend to be unexcitable and resist urges easily. Finally, Vulnerability (N6) is the tendency to be stress-prone and to panic. Individuals high in N6 have difficulty coping with stress, feel vulnerable, and tend to lose their focus in stressful situations. Low scorers, on the other hand, tend to handle stress and even crises with equanimity.

Physical health outcomes

Increasingly, psychological stress is implicated as a contributant to physical well-being and outcomes. Physical outcomes include such variables as hypertension, cardiac disease, cancer, and substance abuse. African Americans have higher rates of hypertension that are believed to be related to socioeconomic status (Kotchen, Kotchen, & Schwertman, 1974). The American Heart Association (1993) reported death rates from high blood pressure in 1990 to be 6 percent for Caucasian males, 30 percent for African-American males, 5 percent for Caucasian females, and 23 percent for African-American females.

As an adult risk factor for coronary heart disease, hypertension no doubt contributes to the higher rates of coronary disease found in African Americans. The American Heart Association (1993) reported data on death rates for cerebrovascular accidents (strokes) in 1990 as follows: 28 percent for Caucasian males, 56 percent for African-American males, 24 percent for Caucasian females, and 43 percent for African-American females. As can be seen, there are dramatic differences between groups for both hypertension and coronary disease.

Some authors have invoked the role of ethnicity-related stressors, particularly discrimination, as contributory to negative physical outcomes (Contrada, et al., 2000). For example, Livingston (1993) focused on the relationship between stress and hypertension in young African-American men. This author found that more than 10 percent of African-American male and 1 percent of female children exhibited evidence of high blood pressure while essentially no Caucasian children exhibited such evidence. Livingston (1993) concluded that young African-American men are particularly susceptible to high blood pressure.

Along similar lines, Krieger and Sidney (1996) found that African-American higher blood pressure (relative to Caucasians) could be partially explained when the experience of discrimination and ensuing responses to such treatment are considered. Such arguments are supported by a study performed by Armstead, Lawler, Gorden, Cross, and Gibbons (1989), who

demonstrated increased cardiovascular responses in African-American respondents when shown videotapes of situations involving discrimination.

Coping strategies and African Americans

In a stress-coping-outcome paradigm, coping strategies serve as a powerful mediator of the expression of stress outcomes such as mental illness and psychophysiological difficulties. Although there are a variety of coping styles for managing stress, the use of religion and acknowledgement of a higher power constitutes a major source of stress resistance.

One central theme emerging from studies of African Americans is the importance of spirituality and the church in their daily lives (Lincoln & Mamyia, 1990). Extending this theme into the realm of mental health, Millet, Sullivan, Schwebel, & James-Myers (1994) hypothesized that the church and spirituality levels associated with African Americans could be a "factor in how African Americans perceive mental health, the etiology of mental illness, and its treatment" (p. 6).

Millet et al., (1994) asked African-American and Caucasian university students to describe causes and preferred treatments of various mental illnesses. They found that African Americans attributed significantly more importance to spirituality in the etiology and amelioration of mental difficulties than did Caucasian students. Hence, the role of religious beliefs and practices is perceived by African Americans as more pronounced in the realm of mental health and wellness and this perception likely influences reactions to stress and ultimately mental health outcomes.

Along similar lines, Dressler (1991) described the importance of the church in coping with stress within a southern African-American community. Dressler (1991) found that, out of four potential coping resources, two involved religious expression. The first coping resource was the level of religious attitudes or spirituality. Dressler (1991) noted, "A strong belief in God was seen as a foundation for dealing actively with day-to-day problems of the world." (p. 215). The second coping resource was religious participation, which is viewed as providing African Americans with social support, affiliative attachment, and a sense of belongingness. It may well be that the documented greater levels of spirituality and religious expression found within typical African-American communities serves as a buffer against ethnic-related stressors.

The present study is descriptive in nature and hence exploratory. The research evidence on negative mental health outcomes for African Americans is contradictory and there is no empirical consensus regarding whether this group is particularly prone to depression or elevations in Negative Affectivity. Hence, there are no *a priori* hypotheses.

Study One

Method

<u>Participants</u>: included 383 individuals who completed the NEO-PI-R (Neuroticism, Extroversion, Openness Personality Inventory - Revised; Costa & McCrae, 1992) as part of their

training for the position of Equal Opportunity Advisor with the Defense Equal Opportunity Institute (DEOMI). There were 172 African-American and 211 Caucasian students. The sample included 244 males (63.2%) and 142 females (36.8%). Some of these data have been reported elsewhere (Johnson, 2000); however, not at the same level of detail as in the present paper.

<u>Procedure</u>: The NEO-PI-R was administered and scored according to standard procedures.

Results

Initial analyses indicated a significant difference in age between African-American and Caucasian participants (\underline{t} (381) = 4.60, \underline{p} < .0001). The mean age for African Americans was 32.56 (\underline{SD} = 10.52) and 36.74 (\underline{SD} = 7.26) for Caucasians. Hence, age was covaried throughout subsequent analyses.

An analysis of covariance with race as a factor and age as a covariate indicated no significant effect for race on Neuroticism (F (1, 381) = 2.02, p < .15). However, a multiple analysis of covariance on Neuroticism facets indicated an effect for race (Wilks' Lambda = 2.89, p < .009). Specifically, the facets of anger (\underline{F} (1, 381) = 4.11, p < .04), discouragement (\underline{F} (1, 381) = 6.83, p < .009), self-consciousness (\underline{F} (1, 381) = 7.65, p < .006), and impulsivity (\underline{F} (1, 381) = 7.80, p < .006) were significantly different between African Americans and Caucasians.

African Americans were significantly lower ($\underline{M} = 48.65$) on anger than Caucasians ($\underline{M} = 50.76$). They were also lower on discouragement ($\underline{M} = 46.85$) and self-consciousness ($\underline{M} = 48.02$) than Caucasians ($\underline{M} = 49.52$, $\underline{M} = 51.14$, respectively). Finally, African Americans ($\underline{M} = 46.85$) were lower than Caucasians ($\underline{M} = 49.66$) on the facet of impulsivity.

Study Two

Method

<u>Participants</u>: included 268 individuals who completed the Five Factor Inventory (FFI) as part of their training for the position of Equal Opportunity Advisor with the DEOMI. There were 135 African Americans and 149 Caucasians. The sample included 173 men (60.9%) and 109 females (38.4%). The mean age for the entire sample (N = 268) was 36.73 (N = 7.17) and there were no significant differences in age between the two groups.

Procedure: The FFI was administered and scored according to standard instructions.

Results

An analysis of variance indicated significant differences between African Americans and Caucasians on Neuroticism (\underline{F} (1, 282) = 4.45, \underline{p} < .03). The mean for Caucasians was 45.39 (SD = 10.29) and 43 (\underline{SD} = 8.59) for African Americans.

Discussion

The present study replicated past research and documented differences in Neuroticism between African Americans and Caucasians. For the most part, African Americans are lower on this factor, and specifically have lower levels of anger, discouragement, and self-consciousness. It is uncertain why this may be the case. Some authors have discussed psychosocial aspects of defense against racism such as armoring (Edmondson, Ella, & Nkomo, 1998) as a buffer zone between the individual and a typically racist society. Others have described levels of spirituality and religious commitment within the African-American community that may function to counteract Neuroticism-associated features such as negative affect and discouragement. However, a comprehensive description and analysis of such potential mediators has not occurred.

In the stress-coping-outcome paradigm, literature on African-American coping and response to prejudice is lacking. There is a similar lack of research on African-American personality structure and whether it differs from that of Caucasians. For example, Day and Bedeian (1995) used structural equation modeling to identify underlying personality structure in African Americans. Although Agreeableness, Extraversion, and Conscientiousness clearly emerged, these authors were unable to extract Neuroticism. Hence, there may be underlying structural as well as mean differences between groups on the factor of Neuroticism. This question awaits future research.

A major question remains regarding how an individual can withstand ethnic-related stressors such as discrimination, attributional ambiguity, and being a member of a devalued or stigmatized group, and NOT demonstrate decreased mental health functioning and lack of well-being. Future research should examine this seemingly inconsistent juxtaposition, and identify important mediators of the relation between ethnic-related stress, psychological, and physical outcomes.

References

- Allport, G. (1954/1979). The nature of prejudice. New York: Doubleday Anchor Books.
- American Heart Association, (1993). <u>Heart and stroke facts: 1994</u> <u>statistical supplement</u>. Dallas:Author.
- Aneshensel, C.S., Clark, V.A., & Frerichs, R.R. (1983). Race, ethnicity, and depression: A confirmatory analysis. <u>Journal of Personality and Social Psychology</u>, 44, 385-398.
- Armstead, C.A., Lawler, K.A., Gorden, G., Cross, J., & Gibbons, J. (1989). Relationship of racial stressors to blood pressure responses and anger expression in Black college students. <u>Health Psychology</u>, 8, 541-556.
- Boykin, A.W. & Toms, L. (1985). The triple quandary and the schooling of Afro-American children. In U. Neisser (Ed.), <u>The school achievement of minority children: New perspectives</u>. Hillsdale, NJ:Lawrence Erlbaum.
- Broman, C.L., Mavaddat, R.., Hsu, S. (2000). The experience and consequences of perceived racial discrimination: A study of African Americans. <u>Journal of Black Psychology</u>, <u>26(2)</u>, 165-180.
- Carver, C.S., Glass, D.C., & Katz, I. (1977). Favorable evaluations of Blacks and the disabled: Positive prejudice, unconscious denial, or social desirability? <u>Journal of Applied Social Psychology</u>, <u>8</u>, 97-106.
- Contrada, R.J., Ashmore, R.D., Gary, M.L., Coups, E., Egeth, J.D., Sewell, A., Ewell, K., Goyal, T.M., & Chasse, V. (2000). Ethnicity-related sources of stress and their effects on wellbeing. <u>Current Directions in Psychological Science</u>, 9(4), 136-139.
- Cose, E. (1993). The rage of a privileged class. New York: Harper Collins.
- Costa, P.T., Jr., and McCrae, R.R. (1992). <u>NEO-PI-R: Professional Manual</u>. Odessa, FL: Psychological Assessment Resources.
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. <u>Personality and Social Psychology Bulletin</u>, 20, 502-513.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. Psychological Review, 96, 608-630.
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), The handbook of social psychology (4th ed., Vol., 2, pp. 504-553). Boston: McGraw-Hill.

- Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. <u>Journal of Personality and Social Psychology</u>, 60, 218-228.
- Day, D.V. & Bedeian, A.G. (1995). Personality similarity and work-related outcomes among African-American nursing personnel: A test of the supplementary model of personenvironment congruence. <u>Journal of Vocational Behavior</u>, <u>46</u>, 55-70.
- Devine, P.G., Evett, S.R., & Vasquez-Suson, K.A. (1996). Exploring the interpersonal dynamics of intergroup contact. In R.M. Sorrentino & E.T. Higgins (Eds.), <u>Handbook of motivation and cognition: The interpersonal context</u> (Vol. 3, pp. 423-464). New York: Guilford.
- Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95, 542-575.
- Diener, E., & Diener, C. (1996). Most people are happy. Psychological Science, 7, 181-185.
- Dressler, W.W. (1991). Stress and adaptation in the context of culture: Depression in a southern Black community. Albany:State University of New York Press.
- Dubois, W.E.B. (1903). The souls of black folks: Essays and sketches. Chicago: Chicago Press.
- Edmondson, B., Ella, L.J., Nkomo, S.M. (1998). Armoring: Learning to withstand racial oppression. <u>Journal of Comparative Family Studies</u>, <u>29</u>(2), 285-295.
- Eysenck, H.J. (1944). Types of personality--a factorial study of 700 neurotic soldiers. <u>Journal of Mental Science</u>, <u>90</u>, 851-861.
- Feagin, J.R. (1991). The continuing significance of race: Antiblack discrimination in public places. <u>American Sociological Review</u>, <u>56</u>, 101-116.
- Gaertner, S.L., & Dovidio, J.F. (1986). The aversive form of racism. In J.F. Dovidio & S.L. Gaertner (Eds.), <u>Prejudice, discrimination, and racism</u> (pp. 61-89). San Diego, CA: Academic Press.
- Graham, S. (1992). "Most of the subjexts were white and middle class": Trends in published research on African Americans in selected APA journals, 1970-1989. <u>American Psychologist</u>, 47, 629-639.
- Jackson, B. (1975). Black identity development. <u>Journal of Education Diversity</u>, 2, 19-25.
- Johnson, J.L. (2000). Racial and gender differences in the five factors of personality within military samples. Satellite Beach, FL: Defense Equal Opportunity Management Institute.

- Johnson, C.L. & Johnson, F.A. (1992). Psychological distress among inner-city American elderly: Structural, developmental, and situational contexts. <u>Journal of Cross-Cultural Gerontology</u>, 7(3), 221-236.
- Jones, R.L. (1991). Black psychology (3rd ed.). Berkeley, CA:Cobb & Henry.
- Jones, E.E., Farina, A., Hastorf, A.H., Markus, H., Miller, O.T., & Scott, R.A. (1984). <u>Social stigma: The psychology of marked relationships</u>. New York:Freeman.
- Kardiner, A., & Ovesey, L. (1951). The mark of oppression: explorations in the personality of the American Negro. New York: World Books.
- Kotchen, J.M., Kotchen, T.A., & Schwertman, N.C. (1974). Blood pressure distributions of urban adolescents. <u>American Journal of Epidemiology</u>, 99, 315-324.
- Krieger, N. (1990). Racial and gender discrimination: Risk factors for high blood pressure. Social Science and Medicine, 30, 1273-1281.
- Krieger, N., & Sidney, S. (1996). Racial discrimination and blood pressure: The CARDIA study of young Black and White adults. <u>American Journal of Public Health</u>, <u>86</u>, 1370-1378.
- LaFromboise, T., Coleman, H.L.K., & Gerton, J. (1994). Psychological impact of biculturalism: evidence and theory. <u>Psychological Bulletin</u>, <u>114</u>(3), 395-412.
- Landrine, H., & Klonoff, E.A. (1996). The Schedule of Racist Events: A measure of racial discrimination and a study of its negative physical and mental consequences. <u>Journal of Black Psychology</u>, 22, 144-168.
- Lincoln, C.E., & Mamyia, L.H. (1990). The Black church in the African-American experience. Durham, NC: Duke University Press.
- Livingston, I.L. (1993). Stress, hypertension, and young Black Americans: The importance of counseling. <u>Journal of Multicultural Counseling and Development</u>, <u>21</u>, 132-142.
- McNulty, J.L., Graham, J.R., Ben-Porath, Y.S., & Stein, L.A.R. (1997). Comparative validity of MMPI-2 scores of African-American and Caucasian mental health center clients. <u>Psychological Assessment</u>, 9(4), 464-470.
- Millet, P.E., Sullivan, B.F., Schwebel, A.I., & James-Myers, L. (1994). <u>Afro-Americans' and Whites' views of the etiology and treatment of mental health problems</u>. Unpublished manuscript.
- Steele, C.M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. <u>American Psychologist</u>, <u>52</u>, 613-629.

- Steele, C.M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. <u>Journal of Personality and Social Psychology</u>, <u>69</u>, 797-811.
- Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A.H. Tuma & J. Maser (Eds.), <u>Anxiety and the anxiety disorders</u>. Hillsdale:Lawrence Erlbaum Associates.
- Thomas A., & Sillen, S. (1972). Racism and psychiatry, Secaucus, NJ:Citadel Press.
- Tyler, T.R., & Lind, E.A. (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), <u>Advances in experimental social psychology</u> (Vol. 25, pp. 115-191). San Diego, CA:Academic Press.
- Williams, D.R., Spencer, M.S., & Jackson, J.S. (1999). Race, stress, and physical health: The role of group identity. In R.J. Contrada & R.D. Ashmore (Eds.), Self, social identity, and physical health: Interdisciplinary explorations (pp. 71-1000). New York: Oxford University Press.
- Williams, D.R. & Williams-Morris, R. (2000). Racism and mental health: The African American experience. Ethnicity & Health, 5(3-4), 243-268.